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ABSTRACT

Adult continuing education (ACE) has different audiences and characteristics than distance learning and full-time education. The University of Hong Kong is regarded as the leading provider of ACE through the programs offered by the School of Professional and Continuing Education (SPACE). To maintain that position, SPACE's challenge is to develop appropriate online ACE supports using World Wide Web technologies. ACE needs online supports different from those in distance learning and general classroom teaching. Unlike distance education and classroom teaching (full-time education), ACE serves students who are frequently absent from classes, who have long working hours, who have little time for self-study and homework, whose teachers are mostly part time, and who come from diversified backgrounds. Although ACE presents some major difficulties for both students and teachers, it has some advantages. ACE students are motivated by teacher and peer contact to continue their studies and are usually self-motivated. Due to ACE's unique characteristics, the emphasis on the overall online support is different. Only necessary and useful information should be put on the web. Teachers should have a simple, well-designed and easy-to-use framework for teachers to put their notes and study guidelines online; class rescheduling and other news should be updated daily. Cyber teaching centers should be developed for large programs or subject areas. (Contains 15 references.) (YLB)

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WWW TECHNOLOGIES AND ADULT CONTINUING EDUCATION

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1. INTRODUCTION

Adult Continuing Education refers to the courses offered to local working adults; Distance Learning is for students who may be far away from the learning institute while Full-Time Education refers to the traditional university education which offers courses for local Full-Time students and the lectures are conducted in day-time. From these short descriptions, one can see that all three modes of education aim at different groups of students. It is quite obvious that they have different characteristics. Adult Continuing Education is common to a small local area like Hong Kong and due to the progress of the society, these mode of education becomes more and more important as well as popular.

The growth of Internet has been tremendously fast. In particular, the current development of WWW provides a user-friendly hypermedia network around the world. How to make good use of these technologies in education becomes a major research topic. Earlier investigation focused mainly on two areas, namely Distance Learning and Class Room Teaching. For Distance Learning [1,9], facilities on the Internet such as WWW,, Telnet, FTP, email system, and Internet Conferencing provide better communication methods for distance learners. The benefit of individual facility seems to be quite obvious. How to make good use of these technologies and how effective each of these technologies can be become a major area of research. For example, In [11], a study on the use of the information communicated during email tutorial has been done. The overall organisational infrastructure of these courses is another important topic being investigated [6].

Another branch of researches focuses on how to use advanced technologies in classroom teaching. One example is to use computer animation to explain complicated concepts such as recursion in programming [5] or adding multimedia effects to support students' learning process. The introduction of these new way of teaching has a great impact on both of the teachers and the students. One implication is that either the teacher should be able to handle the technical part of the preparation or some other support should be given by the corresponding department. "Authoring on the fly" [2] is one of the projects that try to provide a new way of producing hypermedia documents for supporting teaching at universities. Without automatic tools and adequate support, it is very time-consuming, if not difficult, for a teacher to prepare such a lecture. Teachers without the required technical background are usually reluctant to use digital technology in delivering lectures. There are other related problems which need more attention. For example, the social impact of the advanced technologies should not be ignored [15]. Other related studies include virtual learning environments. Interested readers, please refer to [4,7,8,10,13,14] for more related results.

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However, there are very little investigation on how these technologies can be applied to Adult Continuing Education (For more information on the Adult Education in Hong Kong, please refer to [3] and [12]) and to identify the most important areas on which technologies should be applied first. Adult Education has its own set of characteristics which is not the same as Distance Learning or Full-Time Education. Some of these unique characteristics may affect the way technologies should be applied. In this short note, we will discuss some of these issues in Adult Continuing Education.

2. SOME CHARACTERISTICS OF ADULT CONTINUING EDUCATION

In this section, we want to show that there are issues which are unique to Adult Continuing Education. The characteristics given are not complete as we only want to use some specific characteristics to illustrate that in different modes of education, in particular for Adult Continuing Education, the emphasis on which areas the technologies should be applied and how each of these technologies can be used may be different.

The first author is currently working in the School of Professional and Continuing Education (SPACE) of the University of Hong Kong (HKU). SPACE has a long history of providing Adult Continuing Education to the community. More than 700,000 people have registered on SPACE courses in the past 40 years. Since the mid 1980s, SPACE has responded to the growing local demand for professional, postgraduate and degree courses provided through HKU departments and faculties and with overseas partners, particularly where subject areas are not otherwise available in Hong Kong or where the demand is high. And this year there are more than 65,000 people registered with SPACE programmes.

Although the University of Hong Kong is being regarded as the leading provider of Adult Continuing Education through the programmes offered by SPACE, other universities in Hong Kong are increasingly addressing the area of continuing education. In order to maintain the leading position, SPACE's challenge is to develop appropriate online Adult Continuing Education supports using WWW technologies.

What online supports do Adult Continuing Education need? How are those supports different from that of the ones in Distance Learning, or general Class Room teaching?

Adult Continuing Education is different from Distance Learning and general Class Room Teaching (or Full-Time Education) in the following aspects: Firstly, Continuing Education students usually have regular classes out of office hour. Their studies rely a lot on teachers and on face-to-face contacts. However, quite frequently the students (and sometimes the teachers) will not be able to attend classes because of their unexpected over-time work or sometimes because of business trips. This missing class situation is getting more and more popular when Hong Kong is now changing from a manufacturing base to service base society. Therefore, the first difficulty with the Adult Continuing Education students in their studies is their frequent absence from classes.

Secondly, studying a part-time course with a full-time job is extremely difficult, in particular in Hong Kong because nowadays having long working hours is becoming very common. For

example, a recent internal survey shows that our students on average are having 10 hours of working hours per day.

Thirdly, the long working hours and the demanding job together always make an Adult Continuing Education student having very little time for self-study and doing homework at home. Therefore, the time that an Adult Continuing Education student can afford on their studies may be several times less than a regular daytime student.

Fourthly, most teachers in Adult Continuing Education are part-time teachers. There is a lack of teacher offices in the University that students know where to find their teachers whenever they have problems with their studies. Besides, for teachers, there is also a lack of a place and a time that teachers can get together regularly and discuss how to cooperate if they are supposed to work on a same programme or related programmes.

Lastly, Adult Continuing Education students are with diversified backgrounds. This is similar to the students for Distance Learning but is not the same as full time students who usually come from a homogenous group. It is difficult to assure every student has the necessary background before taking a particular class and it is not feasible for the teacher to help each student acquire the knowledge in regular lectures and tutorials.

Although Adult Continuing Education is having the above major difficulties for both students and teachers involved, it has some advantages when comparing with Distance Learning and Full-Time Education. Firstly, unlike Distance Learning in which the drop out rate is usually quite high because the students are having less contact and connection with their classmates and tutors if any, the Adult Continuing Education students are in general having a good momentum to continue with their studies because of the regular class meetings and the peer group's support. Secondly, unlike full time teenager students, adult students are usually very self-motivated. The major role of Adult Continuing Education teachers and the institutions are therefore to facilitate student's learning. Motivating students, criticizing students, and penalizing students, which are important in Full-Time Education, are not very important in Adult Continuing Education.
From the above discussions, we can conclude that Adult Continuing Education are very different from Distant Learning and Full-Time Education. There are some requirements that are unique to an Adult Continuing Education institution. Firstly, the institution must provide an effective and efficient mean for teachers to communicate among themselves and communicates with the institution. This is in particular important for large programmes that may have many subjects and for each subject, there may be many different classes. Secondly, the institution must have a convenient means to inform students of any unexpected class rescheduling within a very short period of time. Thirdly, the institution must provide a clear guideline, a standard for teachers to prepare high quality notes to students in order to make sure that the students can spend their time on studies most effectively. Again, this is crucial for large programmes with which the course quality assurance is most significant. Fourthly, the institution must provide a means that even some students are absent from a class, they will be able to obtain the notes easily and quickly. Before, the above requirements are extremely difficult, if not impossible, to meet. With the advancement of WWW technology nowadays, SPACE is currently investigating a solution that we can foresee to be a major advancement in Adult Continuing Education.

3. WWW TECHNOLOGIES ON ADULT CONTINUING EDUCATION

Based on the characteristics identified in section 2, we want to point out that the emphasis on how technologies should be used in Adult Continuing Education will be different from other modes of education.

Due to the unique characteristics of Adult Continuing Education, the emphasis on the overall online support is different. Firstly, we must have the right amount of online academic support. Students who have been absent from a class can always go to the webpage of that class and be able to know what to do with their studies. Only the necessary and useful information should be put on the web.

Secondly, a simple, well-designed and easy to use framework for teachers to put their notes and study guidelines online. Unlike Distance Learning, regular classes are still a major component in Continuing Education and part-time teachers may not have much time to prepare whole study guide book or textbook for a course, we do not expect every details being online. Also, the emphasis is not to attract the students to stay in the web site so the use of multimedia technologies becomes less important unless it improves the presentation without much overheads. Here overheads mean the preparation time and the speed for downloading the corresponding material. In Full-Time Education, teachers usually have more time to prepare for the lectures. Animation and multimedia technologies are used as these not only improve the presentation, but also motivate the study of the students. These are also useful in Adult Continuing Education but with less importance because of the time limitation of the teachers and the fact that most of the students are self motivated.

Thirdly, the class rescheduling and any other news are being kept update daily. Students can simply go to the webpage and realize if there are any changes.

Fourthly, different email groups and chatting room are being set in order to let teachers teaching the same course or related courses, students taking the same course or in the same tutorial groups, and course coordinators of programmes to communicate conveniently at any time, any place. This provides a cyber department for teachers, students, and the instituation.

Fifthly, cyber teaching centers are developed for large programmes or subject areas. In the cyber teaching centers, websites that are useful for the adult students in a particular programme or a subject area are being put together in a certain way so that students can easily find further support for their studies. For example, links to grammar learning and presentation techniques should be maintained for students to seek help in these aspects. Cyber teaching centers are similar to virtual learning environment. However, the existing virtual learning environment is not mature enough and more has to be done to fit the specific requirements of Adult Continuing Education.

4. CONCLUSION

In this paper, we highlight that there is another mode of education called Adult Continuing Education which has different characteristics than other modes of education such as Distance Learning and Full-Time Education. This area of education needs specific attention when using

WWW technologies to assist the corresponding teaching and learning due to some unique characteristics. We will NOT deny that the developed techniques on how technologies can be applied to Distance Learning and Full-Time Education will also be useful in Adult Continuing Education. However, due to different emphasis, not all of these are ²feasible² in Adult Continuing Education or they may not be as effective as if they are used in Distance Learning and Full-Time Education. For example, it is not feasible or not cost-effective, at least in the present state of technologies, for part-time teachers to prepare multimedia lectures without much overheads. Moreover, this is not an important emphasis for Adult Continuing Education. A research project has been carried out to investigate how individual technology can be used to help running the courses offered by SPACE in a cost-effective way as well as the overall framework for incorporating existing technologies in the whole course structure. A list of recommendations will be produced as a result of this research project. Another research direction will be on the social impact of these advanced technologies on education especially in Hong Kong where the students have very unique characteristics.

REFERENCES

[1] Wing Au, "Telecommunication, Internet and Distance Learning", in http://www.spirit.com.au/ACEC96/papers/au.htm, 1996.

[2] Ch. Bacher et al, "Authoring on the Fly", Proceedings ICCE '97, Malaysia, 1997.

[3] Carol Dalglish, "Adult Education in Hong Kong", National Institute of Adult Continuing Education, Leicester, 1984.

[4] Laurie Lewis et al, "Distance Education in Higher Education Institutions", US Department of Education, NCES 98-062, 1997.

[5] Charles Kann et al, "Integrating Algorithm Animation into a Learning Environment", Computers Education Vol 28 No 4, pp.223-228, 1997.

[6] Diana Laurillard, "Technology for Distance Learning: Organisational Infrastructure", AXIS Vol 4, No 1, pp.33-39, 1997.

[7] Kar-Tin Lee, "Impediments to Good Computing Practice: Some Gender Issues", Computers Education Vol 28 No. 4, pp.251-259, 1997.

[8] Irene Neilson, Ruth Thomas, Calum Smeaton, Alan Slater, and Gopal Chand,"Education 2000: Implications of W3 Technology", Computers Education Vol 26, No 1-3, pp.113-122, 1996.

[9] Daniel Peraya, "Distance Education and the WWW", in http://tecfa.unige.ch/eduws94/contrib/peraya.fm.html, 1994.

[10] Andy Sloane, "Learning with the Web: Experience of Using the World Wide Web in a Learning Environment", Computers Education Vol 28, No 4, pp.207-212, 1997.

[11] John Trushell, Christine Reymond, Roger Herrera, and Pam Dixon, "Undergraduate Students' Use of Information Communicated During E-Mail 'Tutorials'", Computers Education Vol 28, No 1, pp. 11-21,1997.

[12] Pui-Wa Tsang, Rebecca, "Adult Education in Hong Kong, A Study of the School of Professional and Continuing Education", University of Hong Kong, Thesis, University of Hong Kong, 1994.

[13] Ronald J. Vetter, "Web-Based Education Experiences", Computer Vol 30, No 11, 1997.

[14] Renee M. Wachter and Jatinder N. D. Gupta, "Distance Education and The Use of Computers as Instructional Tools for Systems Development Projects: A Case Study of the Construction of Expert Systems", Computers Education Vol 29 No 1, pp.13-23, 1997.

[15] Fred W. Weingarten and Peggy Overbey, "Culture, Society and Advanced Information Technology", Social Aspects Report, CRA, 1996.

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